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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/701,787

11/04/2003

James O. Bechler

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04/06/2006

EXAMINER

TRAN, LY T

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INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

ART UNIT

PAPER NUMBER

2853

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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/701,787	Applicant(s) BEEHLER, JAMES O.	
	Examiner Ly T. TRAN	Art Unit 2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-21 and 24-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-21 and 24-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 7, 9-12, 18-21, 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato (JP 08156351) in view of Miyawaki (US 2002/0047885).

With respect to claims 1, 18, 25 and 29, Sato discloses an apparatus and a method for supporting a media sheet comprising:

- A print engine (fig.1: element 18)
- A negative pressure source (element 19)
- A platen (element 10) operatively coupled to the negative pressure source and disposed adjacent the print engine, the platen including:
  - A contact surface (Fig.6)
  - A channel (element 21a) defining in the contact surface and extending a length, the channel having a varying cross sectional area along at least a portion of the length
  - An air passage (element 21a1) extending from the channel to deliver negative pressure to the channel

- Positioning a back surface of a media against a portion of a contact surface of a platen (Fig.1)
- Establishing negative pressure through an air passage extending from a channel defined in the contact surface, having a length of the channel to suction the media sheet to the a contact surface of the platen (fig.1)

With respect to claims 2, 19 and 28, Sato discloses the varying cross sectional area comprises a tapered portion in the channel (Fig.6: element 21a).

With respect to claims 3 and 20, Sato discloses the tapered portion comprises multiple tapered portions along the length of the channel (element 21a).

With respect to claims 4 and 21, Sato discloses the varying cross sectional area comprises varying a width of the channel (element 21a).

With respect to claims 7 and 24, Sato discloses the air passage (element 21a1) extends from the channel at a tilted orientation configured to reduce friction.

With respect to claim 8, Sato discloses the air passage comprises two air passages extending from a middle portion from the channel (element 21a1).

With respect to claim 10, Sato discloses the channel comprises an elongated recess (21a) defined in the contact surface and extending transverse from the channel

With respect to claim 11, Sato discloses the channel comprises an array of channels extending substantially parallel to each other (fig.6: haft of channel from left to right is a first array, and other haft is a second array)

With respect to claim 12, the channel comprises a first array of channels and a second array of channels, the first array of the channels extending substantially parallel

to each other and the second array of the channels extending substantially parallel to each other (fig.6).

With respect to claim 26, Sato discloses positioning the media sheet to leave an exposed channel portion, uncovered by the media sheet, to suction the media to the contact surface of the platen (Fig.2).

However, Sato fails to teach the channel having a varying a depth of the channel along at least a portion of the length and the air passage extends from a first end portion of the channel with a second end portion of the channel having a smaller cross sectional than the first end portion.

Miyawaki teaches the channel having a varying a depth of the channel along at least a portion of the length and the air passage extends from a first end portion of the channel with a second end portion of the channel having a smaller cross sectional than the first end portion (Fig.3: element 22,23).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to vary a depth of the channel along at least a portion of the length as taught by Miyawaki. The motivation of doing is to allow the absorbing power to be reduced even when the opening of the platen is covered only partly by the recording medium.

2. Claims 1,12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Madsen et al (USPN 6,209,867) in view of Miyawaki (US 2002/0047885).

With respect to claims 1, 12 and 13, Madsen discloses a platen (Fig.4: element 402) for supporting a media sheet comprising:

- A contact surface (element 403)
- A channel (element 407) defining in the contact surface and extending a length
- An air passage (element 409) extending from the channel to deliver negative pressure to the channel
- The channel comprises a first array of channels and a second array of channels, the first array of the channels extending substantially parallel to each other and the second array of the channels extending substantially parallel to each other and at least one of the channels in the first array includes a common longitudinal axis with at least one of the channels in the second array (Fig.4)

However, Madsen fails to teach the channel having a varying cross sectional.

Miyawaki teaches the channel having a varying cross sectional (Fig.3)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have a cross sectional channel as taught by Miyawaki. The motivation of doing so is to prevent fouling of a sheet to contact of the sheet with a recording head.

***Response to Arguments***

3. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection above.

***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ly T. TRAN whose telephone number is 571-272-2155. The examiner can normally be reached on M-F (7:30am-5pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LT

March 30, 2006

  
**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**